REMARKS

In the original case of Serial No. 09/339,128, the Examiner restricted claims 14-15, and 18 as a separate group. The Applicant now files this Divisional Application to prosecute those claims. In the present Divisional Application, Claims 1-22 are cancelled, and replaced by new Claim 23-52 in order to overcome rejections on the original Claims 1-13, which are related to the method claims 14-15, 18. The new claims find support throughout the specification as filed, and in particular as highlighted below:

In Claim 23, "A supported catalyst composition comprising one or more fluorided support compositions; one or more metallocenes; and one or more activators" finds support on page 4, lines 11-13, and throughout the specification.

In Claim 23, "α-olefin monomers" finds support on page 18, lines 29-31, and throughout the specification.

In Claim 23, "a productivity of from 919 to 6012 g polymer/g metallocene·hr" finds support on page 35, Table 6 value in Example 33 and Example 55 of Table 14, page 43, both productivity values calculated from polypropylene polymerization under similar conditions.

In Claim 24, the claimed values also find support in Table 6, Examples 33 and 35, and throughout the specification.

In Claim 25, the claimed values find support on page 6, lines 6-7.

In Claim 26, the claimed values find support on page 6, lines 10-12.

In Claim 27, the "alkylalumoxanes (MAO), non-coordinating anions, and activator anion neutral precursors, and combinations thereof" are selected from page 14, lines 6-15, page 15 and 16, and page 17, lines 1-15, respectively, and throughout the specification.

Claim 28 finds support from page 17, lines 24-25, and throughout the specification.

Claim 29 finds support from page 17, lines 20-25, and throughout the specification.

Claims 30 and 31 finds support from pages 7-13, and throughout the specification.

Claim 32 finds support on page 5, lines 1-7.

Claim 33 finds support in values from Table 6 on page 35, the propylene polymerizations being carried out under similar conditions.

Claim 34 and 35 find support as above, the value of "1125 g polymer/g catalyst-hr. found on page 36, Table 9 in Example 41, the propylene polymerizations being carried out under similar conditions as the upper limit value.

Claims 36 and 38 find support on pages 18-19, and throughout the specification.

Support for the Claims 39-52 are as stated above, and in the previously submitted claims from which this Divisional Application is filed.

The Applicant believes the claims 23-52 to be allowable as submitted, and requests allowance. The Examiner is invited to telephone the undersigned attorney if there are any other issues outstanding which have not been presented to the Examiner's satisfaction.

Respectfully submitted,

February 11/02
Date

Kevin M. Faulkner
Attorney for Applicants
Registration No. 45,427

ExxonMobil Chemical Company
Law Technology
P.O. Box 2149
Baytown, Texas 77522-2149
Phone: 281-834-2677
Fax: 281-834-2495

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HIGHLY ACTIVE SUPPORTED CATALYST COMPOSITIONS

Sub A1

~~This is a Regular Application based on a Provisional Application No. 60/098007 filed on August 26, 1998.~~

[see page 2 of "prelim Amendment]

FIELD OF INVENTION

This invention relates generally to supported catalysts, and more particularly to supported metallocene catalysts and methods for their production and use.

BACKGROUND

Metallocene catalyst systems and their use for olefin polymerization are well known. Metallocene catalysts are single-sited and differently activated compared to conventional Ziegler-Natta catalysts. A typical metallocene catalyst system includes a metallocene catalyst, a support, and an activator. Upon attaching or "fixing" the catalyst to the support, the catalyst is generally referred to as a supported catalyst. For many polymerization processes, supported catalysts are required, and various methods for attaching metallocene catalysts to a support are known in the art. Supports suitable for use with metallocene catalyst are generally porous materials and can include organic materials, inorganic materials and inorganic oxides.

However, many supports contain reactive functionalities. In some instances, these reactive functionalities may deactivate or reduce the activity of the catalyst fixed to the support. When this occurs, the addition of more catalyst to the catalyst system may be necessary to ensure sufficient polymer production during olefin polymerization. Increasing the catalyst concentration in the catalyst system to compensate for activity reduction caused by reactive functionalities is generally undesirable for many reasons. For instance, generally the addition of more catalyst may also require the addition of more activator. As such, increasing the concentrations of both catalyst and activator to overcome the effects of catalyst

HIGHLY ACTIVE SUPPORTED CATALYST COMPOSITIONS

CROSS-REFERENCE TO RELATED APPLICATION

The present application is a Divisional application of, and claims priority to, U.S.S.N. 09/339,128, filed on June 24, 1999, which claims priority to Provisional Patent Application U.S.S.N. 60/098,007.

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